

INSTALLATION MANUAL

For gullies and channels





Installation manual

1. Fixed height solution 4

2. Telescopic solution 11



■ Introduction

Installation manual for fixed height and telescopic gullies

ACO company

ACO is a global producer and supplier of stainless steel drainage products. All products are developed and produced with an uncompromising commitment to health, safety & hygiene. More than 60 years of drainage experience makes ACO the worldclass supplier of drainage systems.

ACO gully

ACO stainless steel gullies are designed to be used in commercial applications where hygiene, durability and performance requirements

are paramount. ACO gullies are available in a number of versions featuring different flow rates, grating designs, sizes and spigot outlet diameters to suit various applications. The floor construction and depth together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully. ACO offers 4 generic gully configurations. Fixed height gullies are convenient, freestanding units suitable for cementitious, resin or tiled floors. Telescopic gullies can be installed either with

ACO gully tops or with ACO stainless steel linear drainage channels in most flooring constructions, including floors with waterproofing membranes. All ACO gullies are available with vertical or horizontal spigot outlets.

Certification

ACO stainless steel gullies are manufactured and tested in accordance with EN 1253 – Gullies in buildings.

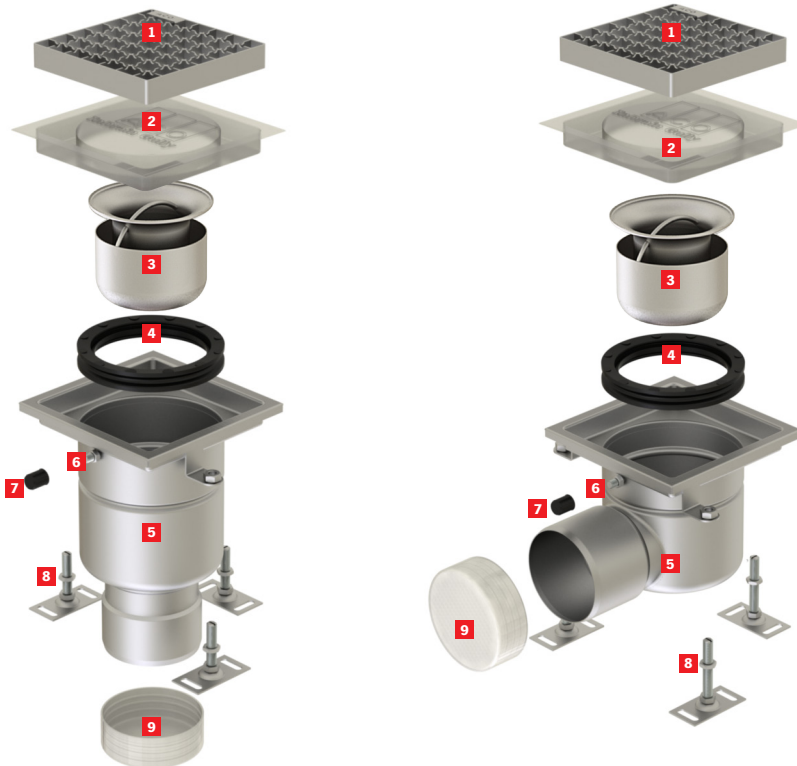


Fixed height solution

Fixed height vertical gully

Fixed height horizontal gully

Leave the protective elements (blister, protective tapes, spacers, foul air trap) in their places for the duration of the installation works!



- 1 Grating
- 2 Blister
- 3 Foul air trap

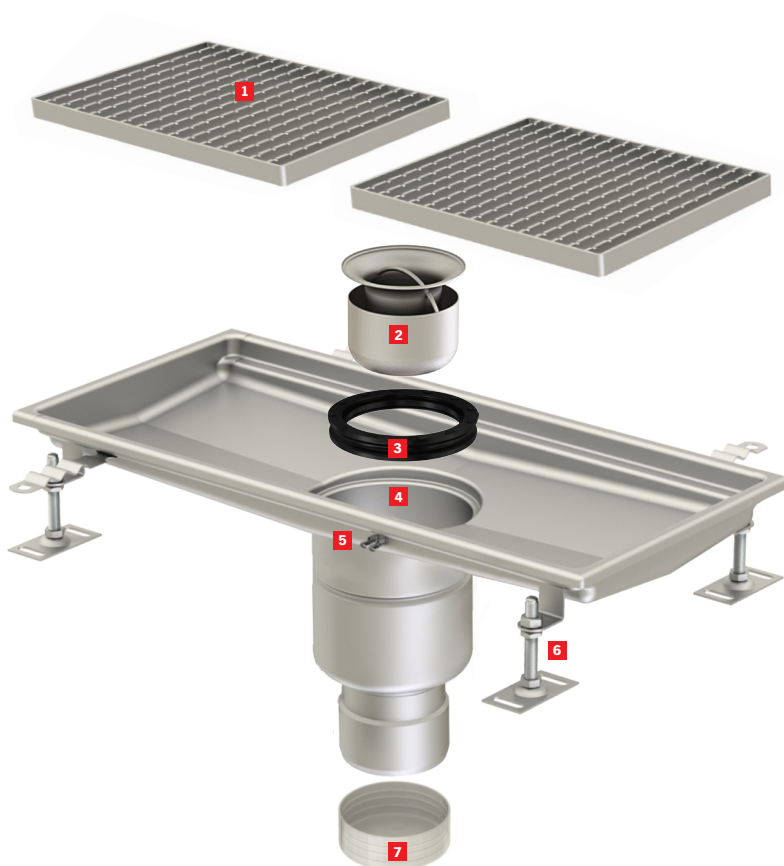
- 4 Foul air trap support
- 5 Gully body
- 6 Earthling

- 7 Earthling cover
- 8 Leveling feet
- 9 Outlet cover

Fixed height solution

Fixed height vertical channel

Leave the protective elements (blister, protective tapes, spacers, foul air trap) in their places for the duration of the installation works!

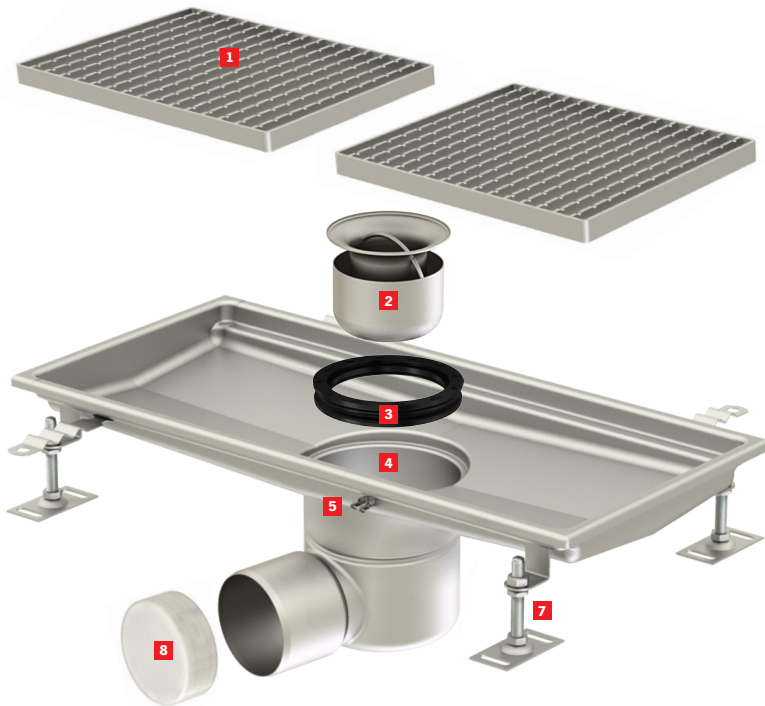


- 1 Gratings
- 2 Foul air trap
- 3 Foul air trap support

- 4 Channel body
- 5 Earthing
- 6 Leveling feet

- 7 Outlet cover

Fixed height horizontal channel



- 1 Gratings
- 2 Foul air trap
- 3 Foul air trap support

- 4 Channel body
- 5 Earthing
- 6 Leveling feet

- 7 Outlet cover

Fixed height solution

Installation into the ground floor level

The same instructions for gullies and channels (represented by gullies)

Phase 1

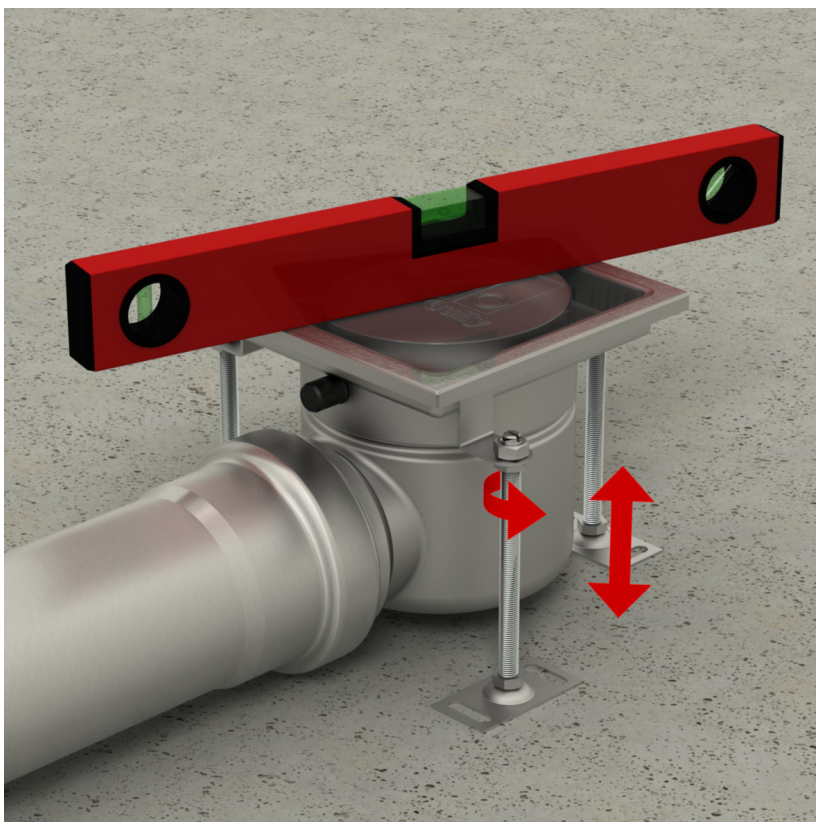
1. Remove the outlet cover.
2. Connect the pipe.
3. Take Care to ensure connection is sealed perfectly, when the drain tube is inserted into the outlet pipe.
4. In case of the gully with horizontal outlet, it is necessary to ensure the minimum gradient of the drain pipe.



Installation into the ground floor level

Phase 2

1. Level the unit at the required height and horizontal plane using the leveling feet.



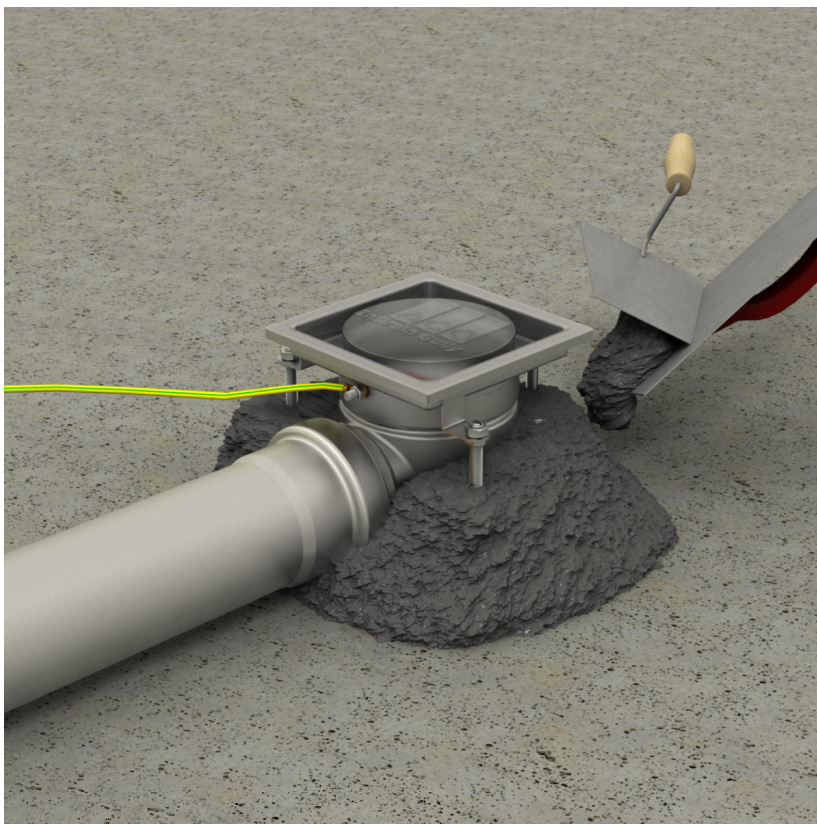
■ Fixed height solution

Installation into the ground floor level

Phase 3

1. Before concreting, adjust gully or channel with using leveling feet and secure it in this position by screwing or using suitable weight, etc.
2. Concrete the gully carefully up to the half-height of its body.
3. Before placing the concrete over the entire floor, it is necessary to keep the technological break to ensure the curing of the concrete.
4. If the grounding is necessary, connect the grounding conductor.

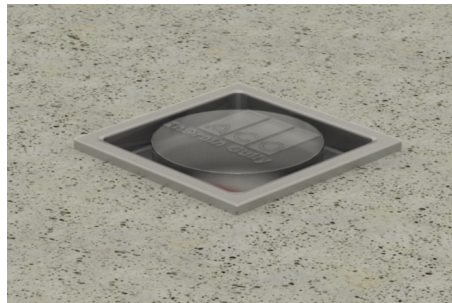
During the concreting, leave the blister on as the protective cover to prevent the dirt penetrating the gully.



Installation into the ground floor level

Phase 4

1. Complete the concreting to the required height.
2. Consider the wear layer thickness of the completed floor.

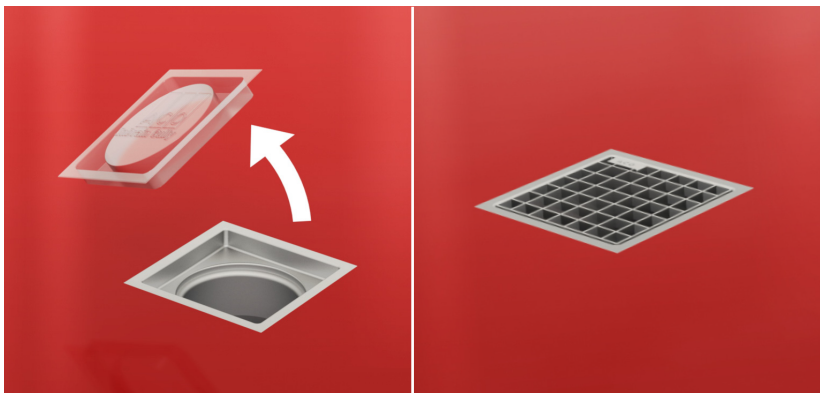


Phase 5

1. Lay the final floor layer (resin floor, tiles).
2. Fill the gap around the gully top by flexible sealant - for details follow final floor supplier instructions.
3. Remove all protective elements (blister of foil).

Phase 6

1. Check the installation of the foul air trap. The foul air trap must be installed by pressing into the foul air trap support.
2. Fill the foul air trap with water.
3. Install the grating.

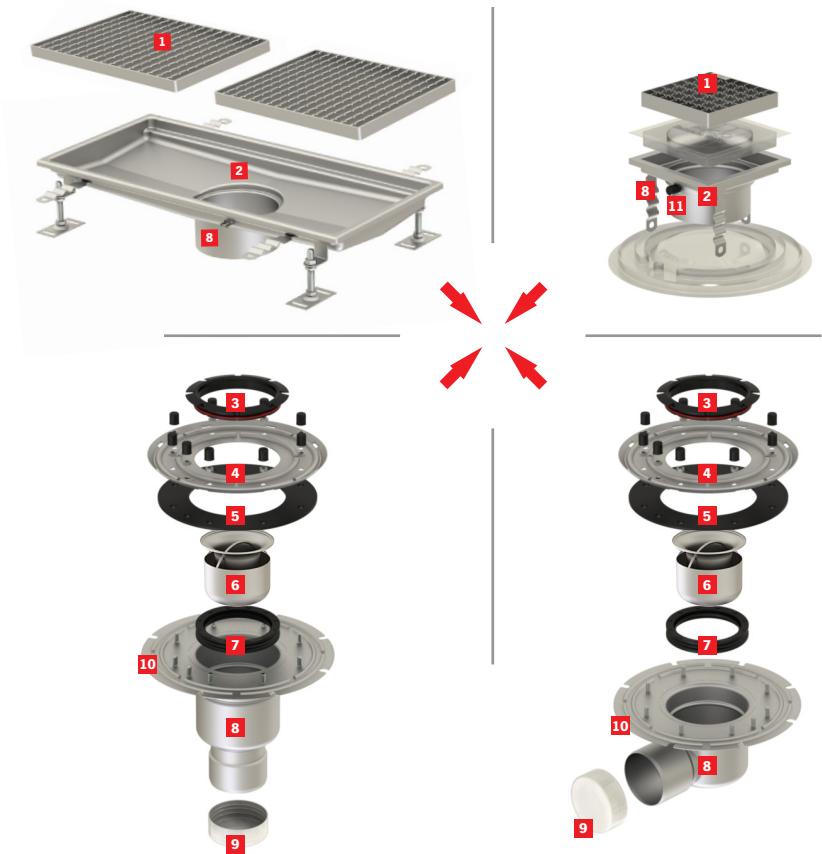


≡ **Telescopic solution**

Telescopic vertical

Telescopic horizontal

Leave the protective elements (blister, protective tapes, spacers, foul air trap) in their places for the duration of the installation works!



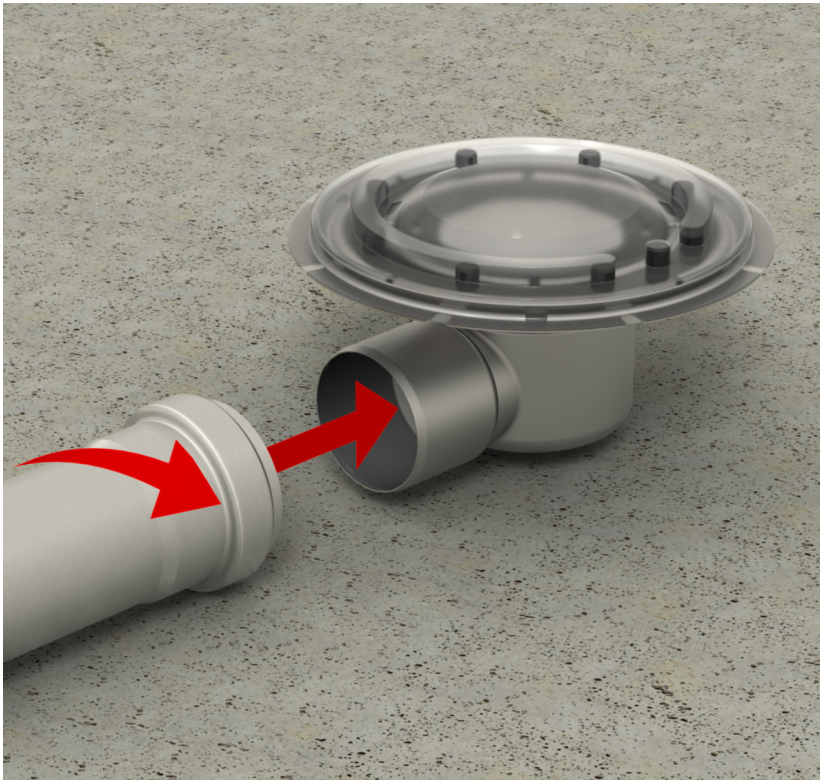
- 1 Grating
- 2 Channel or gully top
- 3 Friction lock ring (draining/sealing)
- 4 Seal of mechanical flange
- 5 Clamp of the mechanical flange
- 6 Foul air trap
- 7 Foul air trap support
- 8 Gully body
- 9 Outlet cover
- 10 Earthling

- 11 Earthling cover

Installation into the ground floor level

Phase 1

1. Remove the outlet cover.
2. Connect the pipe.
3. Take Care to ensure connection is sealed perfectly, when the drain tube is inserted into the outlet pipe.
4. When installing a gully with a horizontal outlet it is necessary to ensure a minimum gradient of the drain pipe.



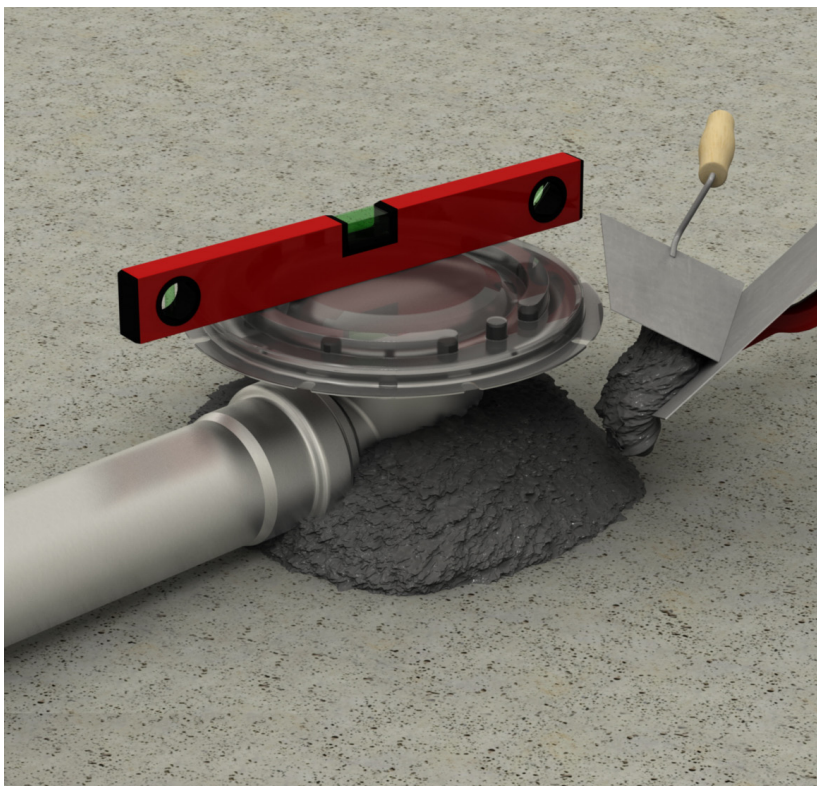
≡ Telescopic solution

Installation into the ground floor level

Phase 2

1. Level the gully body at the required height and horizontal plane.
2. Support with suitable material, if necessary.
3. Before final concreting of the floor, secure the gully against the movement by partial concreting at least to the half-height of the body.

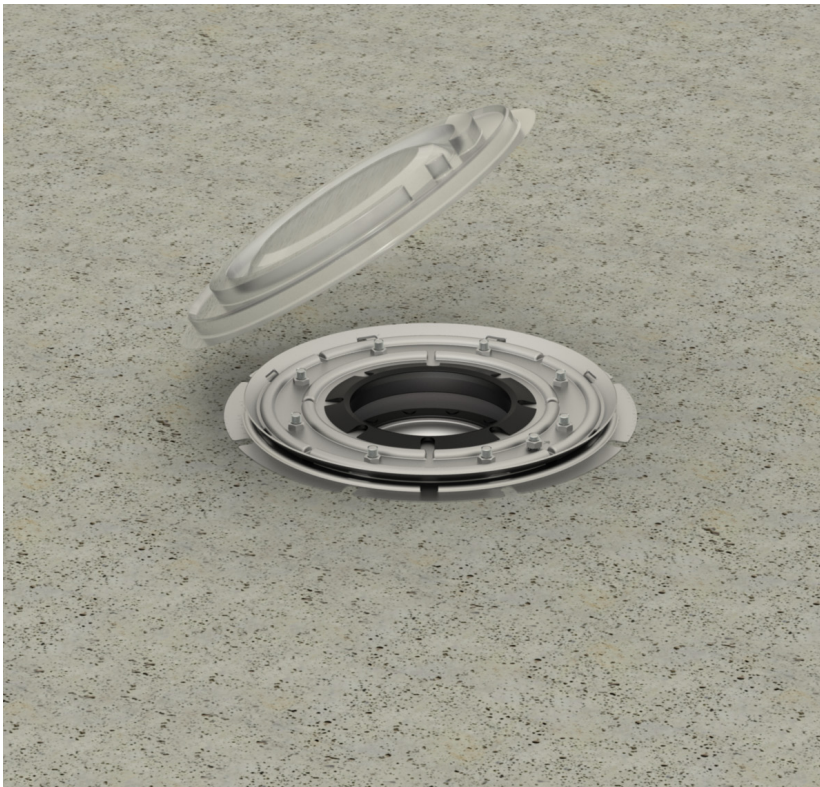
During the concreting, leave the blister on as the protective cover to prevent the dirt penetrating the gully.



Installation into the ground floor level

Phase 3

1. Concrete up to the flange.
2. Remove blister.



≡ Telescopic solution

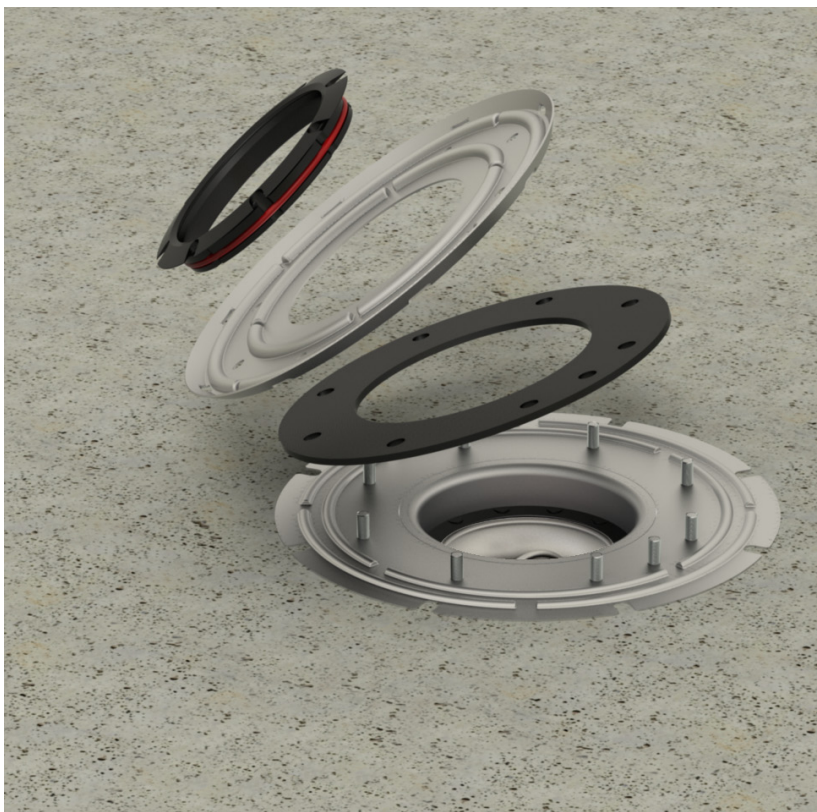
Installation into the ground floor level

Phase 4

1. Remove the bolts and clamp with rubber seal (valid only for model with mechanical clamping flange).
2. Remove the friction lock ring.

ATTENTION

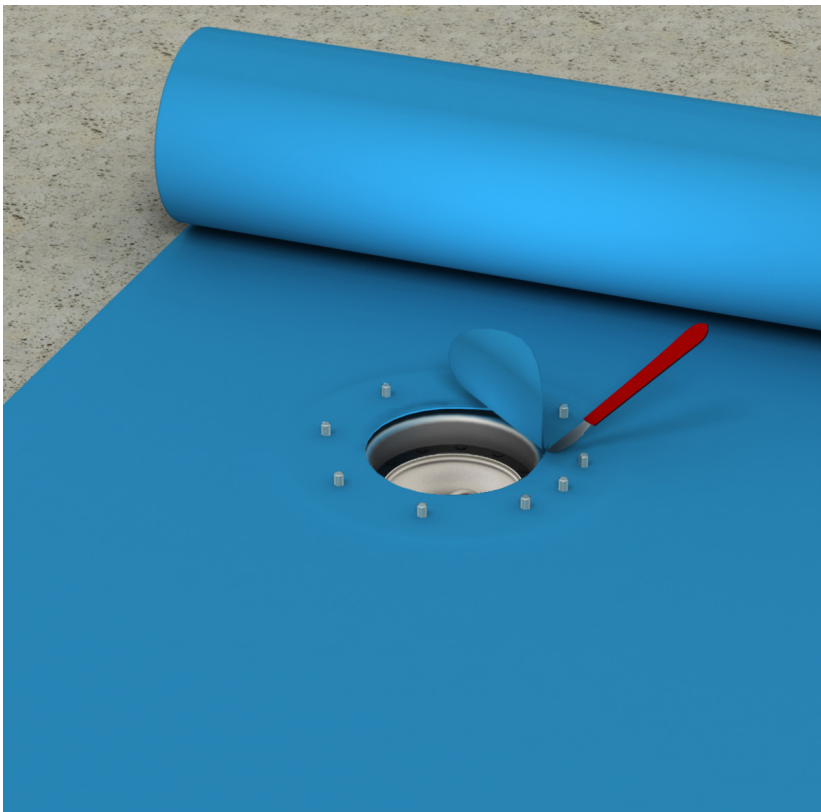
The foul air trap and foul air trap support ring must be placed in the body of gully during the installation works, otherwise fitting after gully top installation might be impossible.



Installation into the ground floor level

Phase 5

1. Install the water-proofing membrane (valid only for gullies with flange).
2. Cut the opening and finish.
3. Connecting joints of two strips of the water-proofing membrane must be outside of the flange area.



≡ Telescopic solution

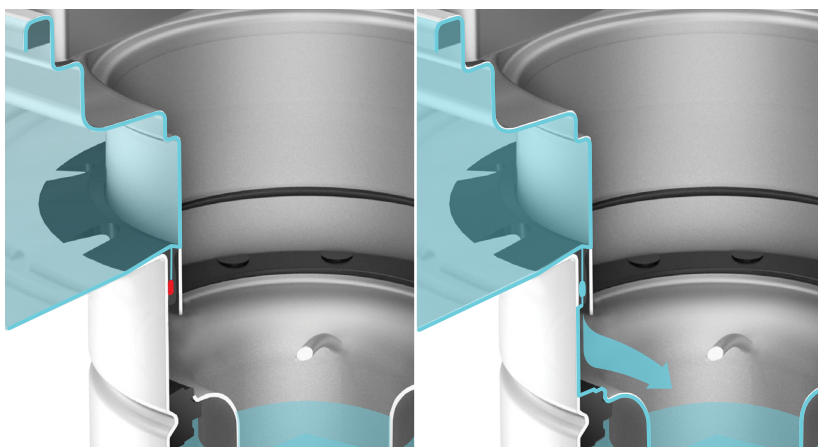
Installation into the ground floor level

Phase 6

If it is necessary to drain the water from the water-proofing membrane into the gully body, modify the friction lock ring for draining function – remove the red O-ring.

Features and benefits

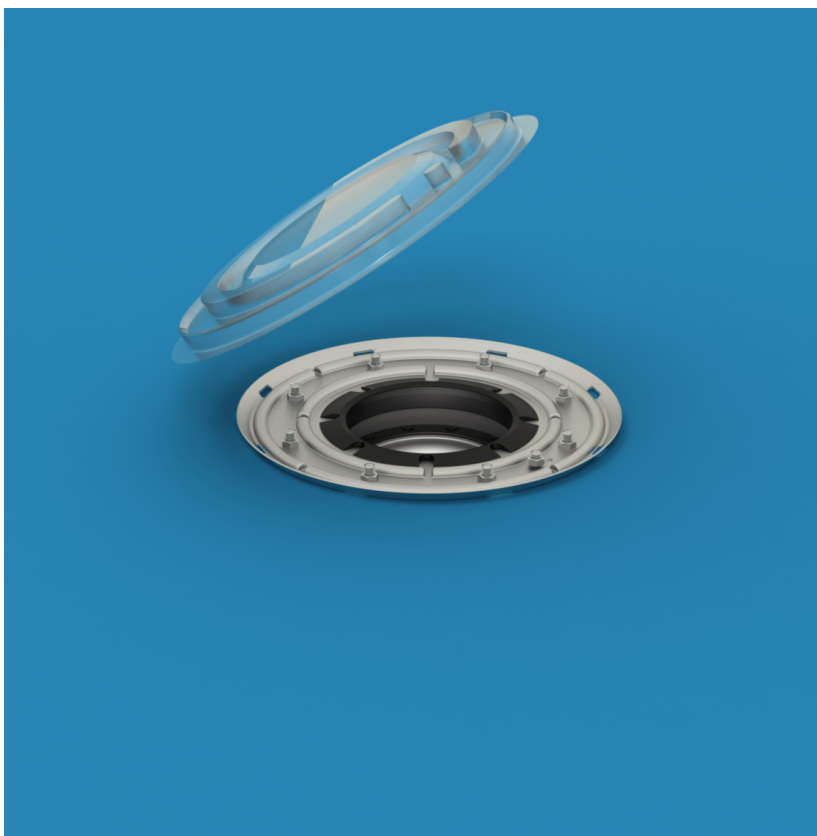
Friction ring



Installation into the ground floor level

Phase 7

1. Install the rubber sealing and fasten clamp with bolts – torque to 20 Nm (valid only for model with mechanical thrust flange).
2. Install the friction lock ring to the top of the gully at the location of transition radius between the gully body and the flange.

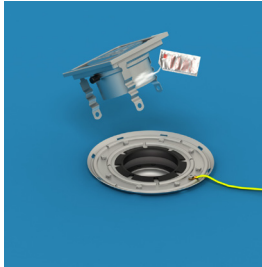


≡ Telescopic solution

Installation into the ground floor level

Phase 8

1. If the grounding is necessary, connect the grounding conductor.
2. Install the top (gully top, tray channel, slot and box channel outlet unit). To make installation easier, use the enclosed ACO lubricant.



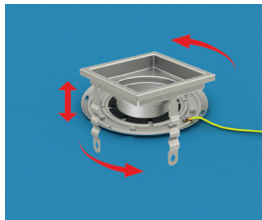
Phase 9

3. Adjust the gully top to the required height and horizontal plane, according to the final level of the floor.
4. Rotate the gully top to the required position and verify the correct location of the friction lock ring.

The protective elements, for example blister, protective tapes and spacers, must be left in their places for the entire period of the installation!

ATTENTION

The gully top and channel may be only in slight contact with the supporting ring of the foul air trap. The supporting ring position must not change.



If the lower installation height of the gully top and channel is required, it is necessary to cut the outlet pipe of the gully top and channel.

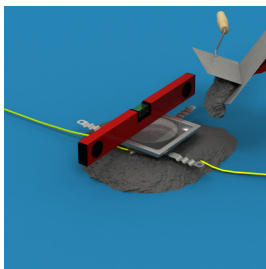
The upper edge of the gully top and channel may not in any case be higher than the height of the completed floor!

Installation into the ground floor level

Phase 10

1. If the grounding is necessary, connect the grounding conductor to the gully top.
2. Before concreting the floor, secure the gully top and channel against the movement by its partial concreting to the grounding bolt.
3. Before placing the concrete over the entire floor, it is necessary to keep the technological break to ensure the curing of the concrete.

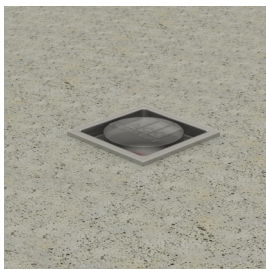
During the concreting, keep the blister on as the protective cover to prevent the dirt penetrating the gully top.



Phase 11

1. Complete the concreting to the required height.

Consider the wear layer thickness of the completed floor.



≡ Telescopic solution

Installation into the ground floor level

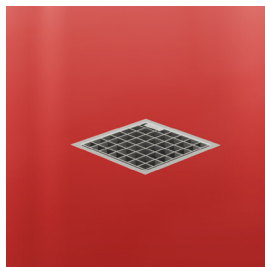
Phase 12

1. Lay the final floor layer (resin floor, tiles).
2. If the final layer of the floor is to be tiles, fill the gap around the gully top and channel by flexible sealant.
3. Remove all protective elements.



Phase 13

1. Check the installation of the foul air trap. The foul air trap must be installed by pressing into the foul air trap support, uniformly all around the circumference.
2. Fill the foul air trap with water.
3. Install the grating.

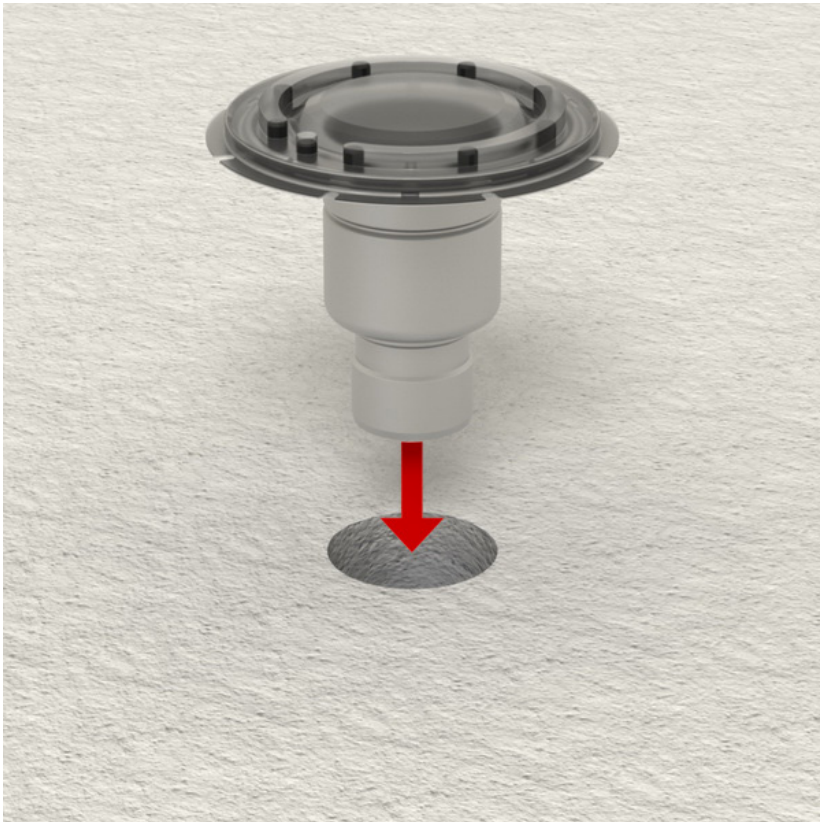


Installation into the ceiling slab without fit-in

Phase 1

1. Drill the bore in the ceiling structure according to the recommended drilling diameters.
2. Insert the gully into the drilled bore.

Recommended drilling diameters:	
	[mm] without Fit-in
ACO gully 142	152
ACO gully 157	162
ACO gully 218	225

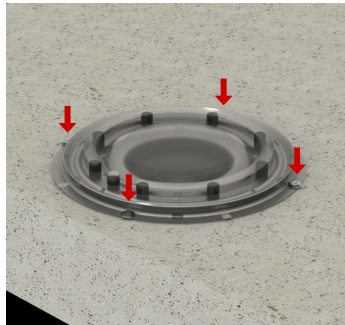


≡ Telescopic solution

Installation into the ceiling slab without fit-in

Phase 2

1. If necessary, secure the position of the gully by its fastening with bolts inserted through the openings in the flange.

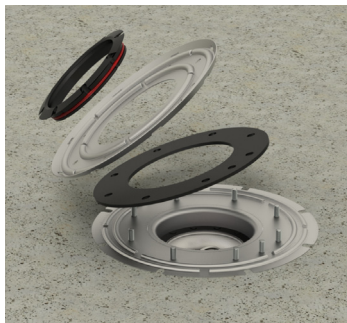


Phase 3

1. Remove the bolts and clamp with rubber seal (valid only for model with mechanical clamping flange).
2. Remove the friction lock ring.

ATTENTION

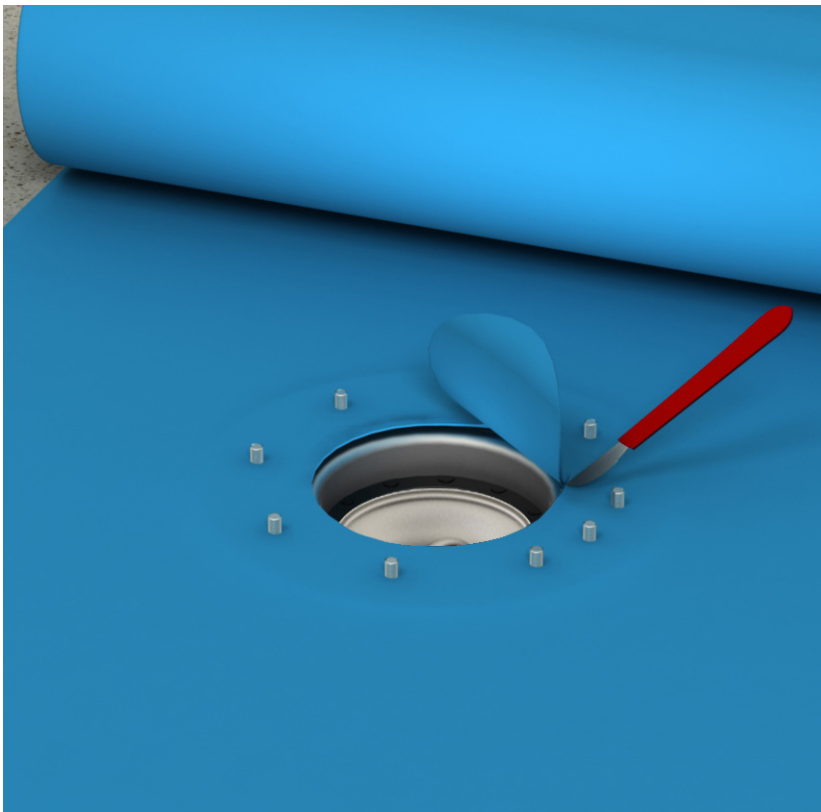
The foul air trap and foul air trap support ring must be placed in the body of gully during the installation works, otherwise fitting after gully top and channel installation might be impossible.



Installation into the ceiling slab without fit-in

Phase 4

1. Install the water-proofing membrane (valid only for gullies with flange).
2. Cut the opening and finish.
3. Connecting joints of two strips of the water-proofing membrane must be outside of the flange area.



≡ Telescopic solution

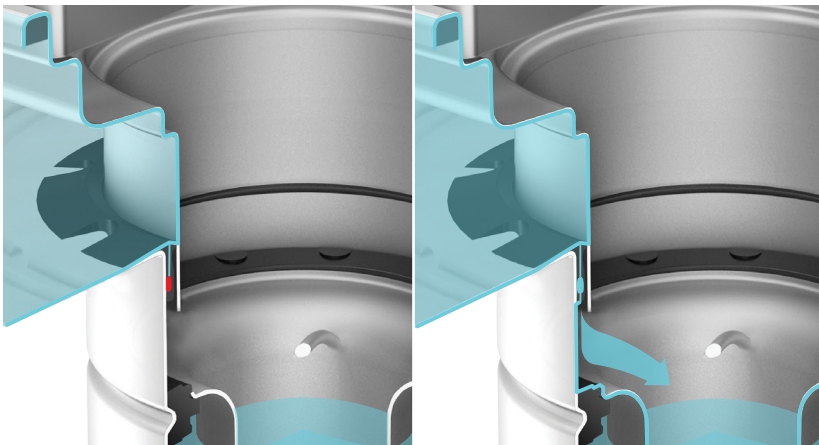
Installation into the ceiling slab without fit-in

Phase 5

If it is necessary to drain the water from the water-proofing membrane into the gully body, modify the friction lock ring for draining function – remove the red O-ring.

Features and benefits

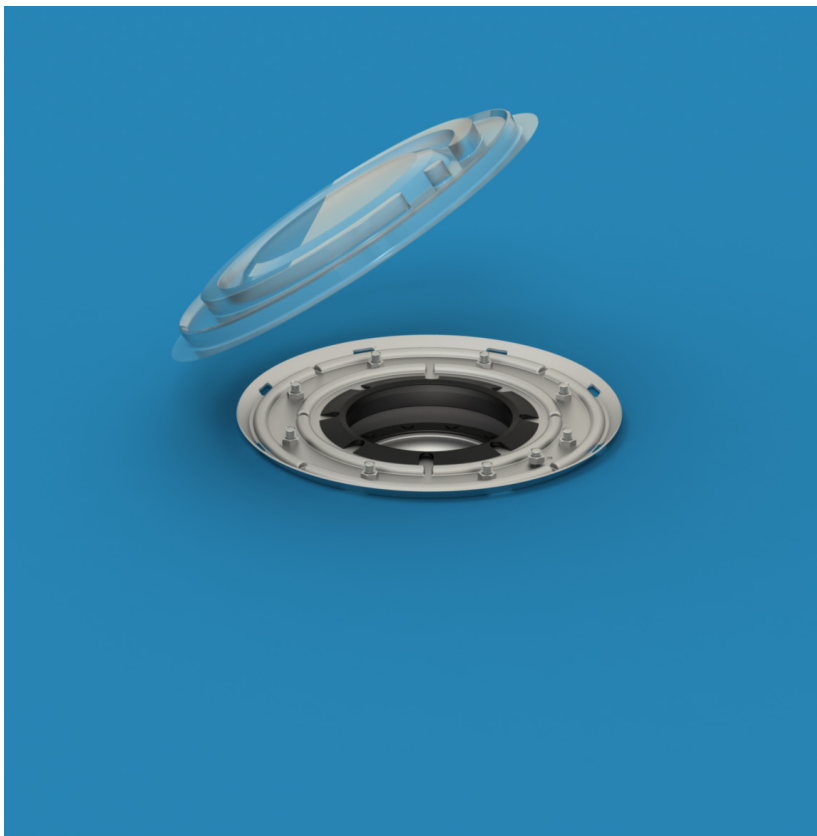
Friction ring



Installation into the ceiling slab without fit-in

Phase 6

1. Install the rubber sealing and fasten clamp with bolts – torque to 20 Nm (valid only for model with mechanical thrust flange).
2. Install the friction lock ring to the top of the gully at the location of transition radius between the gully body and the flange.

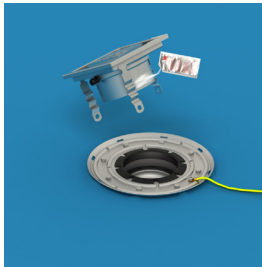


≡ Telescopic solution

Installation into the ceiling slab without fit-in

Phase 7

1. If the grounding is necessary, connect the grounding conductor.
2. Install the top (gully top, tray channel, slot and box channel outlet unit). To make installation easier, use the enclosed ACO lubricant.



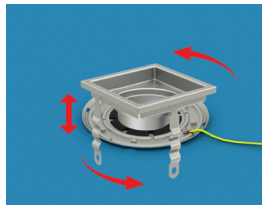
Phase 8

3. Adjust the gully top and channel to the required height and horizontal plane, according to the final level of the floor.
4. Rotate the gully top and channel to the required position and verify the correct location of the friction lock ring.

The protective elements, for example blister, protective tapes and spacers, must be left in their places for the entire period of the installation!

ATTENTION

The gully top and channel may be only in slight contact with the supporting ring of the foul air trap. The supporting ring position must not change.



If the lower installation height of the gully top and channel is required, it is necessary to cut the outlet pipe of the gully top and channel.

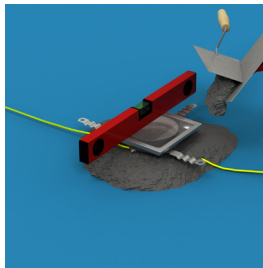
The upper edge of the gully top and channel may not in any case be higher than the height of the completed floor!

Installation into the ceiling slab without fit-in

Phase 9

1. If the grounding is necessary, connect the grounding conductor to the gully top.
2. Before concreting the floor, secure the gully top and channel against the movement by its partial concreting to the grounding bolt.
3. Before placing the concrete over the entire floor, it is necessary to keep the technological break to ensure the curing of the concrete.

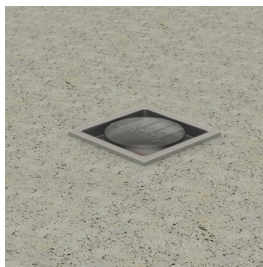
During the concreting, keep the blister on as the protective cover to prevent the dirt penetrating the gully top.



Phase 10

1. Complete the concreting to the required height.

Consider the wear layer thickness of the completed floor.



≡ Telescopic solution

Installation into the ceiling slab without fit-in

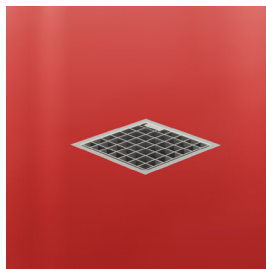
Phase 11

1. Lay the final floor layer (resin floor, tiles).
2. If the final layer of the floor is to be tiles, fill the gap around the gully top by flexible sealant.
3. Remove all protective elements.



Phase 12

1. Check the installation of the foul air trap. The foul air trap must be installed by pressing into the foul air trap support, uniformly all around the circumference.
2. Fill the foul air trap with water.
3. Install the grating.

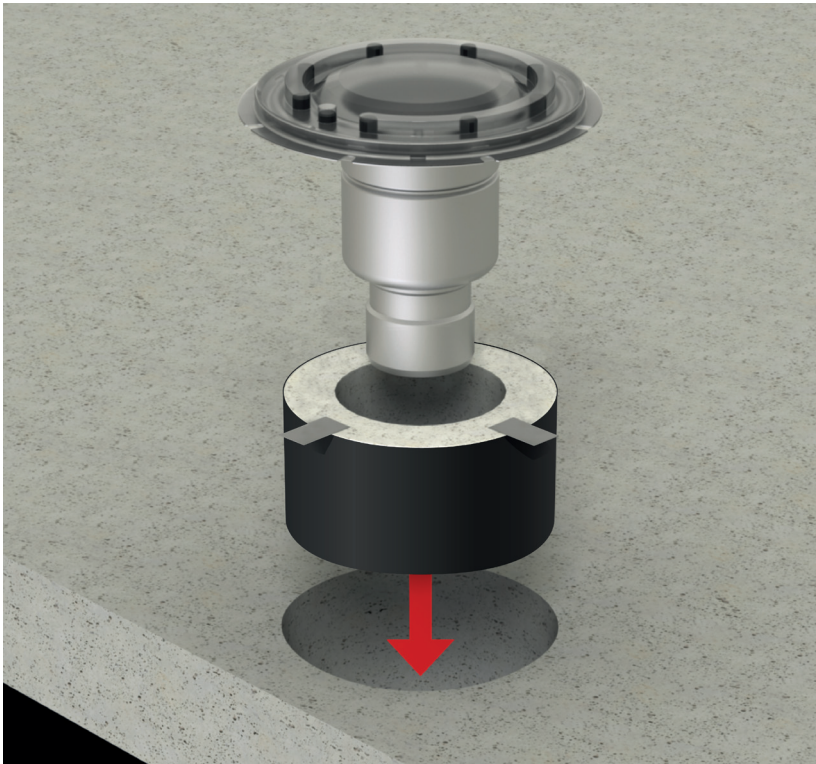


Installation into the ceiling slab with fit-in

Phase 1

1. Drill the bore in the ceiling structure according to the recommended drilling diameters.
2. Install the Fit-in into the drilled opening.
3. If necessary, secure the position of the Fit-in by its fastening with bolts over the fastening strips.

Recommended drilling diameters:	
	[mm] with Fit-in
ACO gully 142	200
ACO gully 157	225
ACO gully 218	300

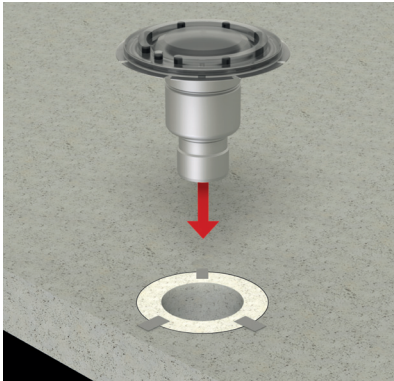


≡ Telescopic solution

Installation into the ceiling slab with fit-in

Phase 2

1. Install the gully into the Fit-In insert.
2. If necessary, secure the position of the Fit-in by its fastening with bolts over the fastening strips.



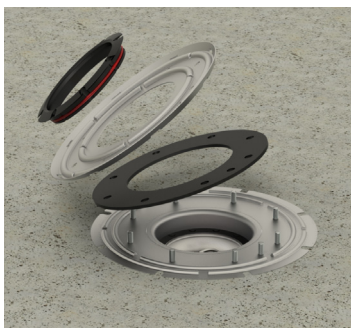
Installation into the ceiling slab with fit-in

Phase 3

1. Remove the bolts and clamp with rubber seal (valid only for model with mechanical clamping flange).
2. Remove the friction lock ring.

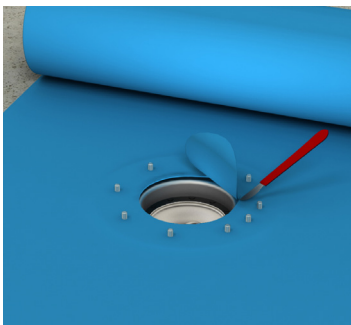
ATTENTION

The foul air trap and foul air trap support ring must be placed in the body of gully during the installation works, otherwise fitting after gully top and channel installation might be impossible.



Phase 4

1. Install the water-proofing membrane (valid only for gullies with flange).
2. Cut the opening and finish.
3. Connecting joints of two strips of the water-proofing membrane must be outside of the flange area.



≡ Telescopic solution

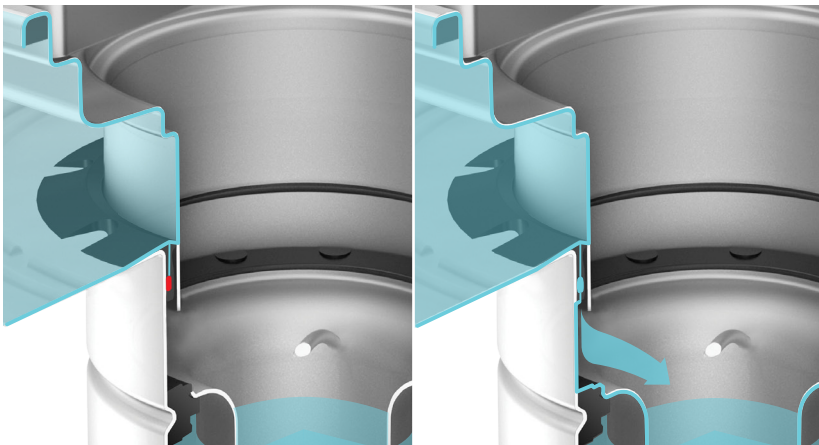
Installation into the ceiling slab with fit-in

Phase 6

If it is necessary to drain the water from the water-proofing membrane into the gully body, modify the friction lock ring for draining function – remove the red O-ring.

Features and benefits

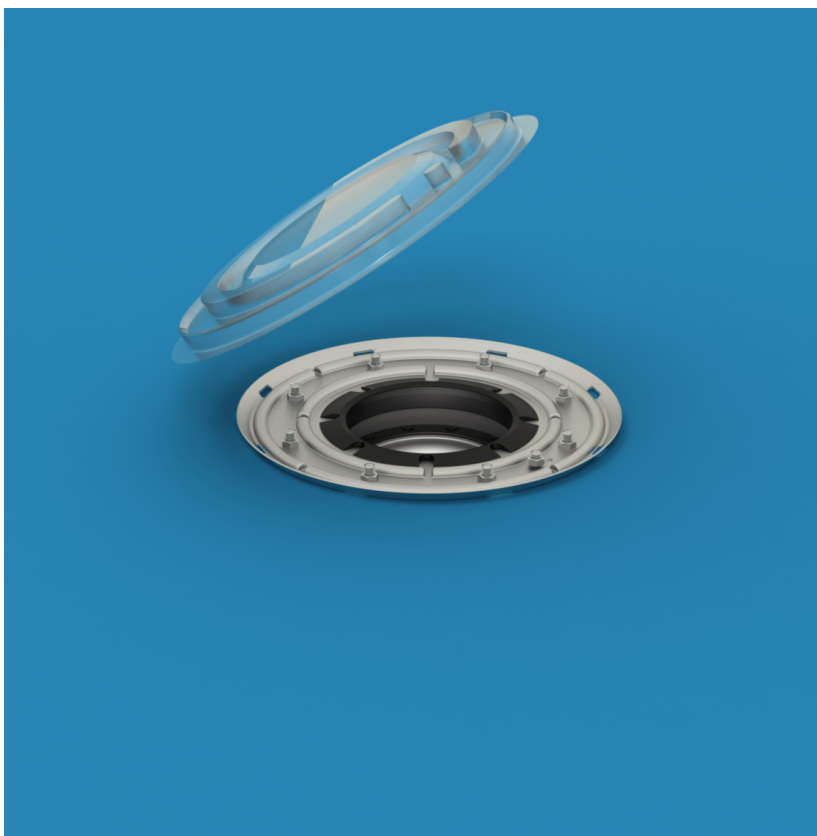
Friction ring



Installation into the ceiling slab with fit-in

Phase 7

1. Install the rubber sealing and fasten clamp with bolts – torque to 20 Nm (valid only for model with mechanical thrust flange).
2. Install the friction lock ring to the top of the gully at the location of transition radius between the gully body and the flange.

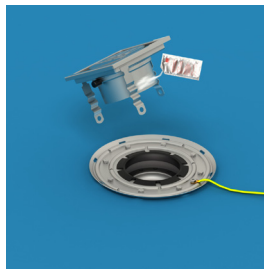


≡ Telescopic solution

Installation into the ceiling slab with fit-in

Phase 8

1. If the grounding is necessary, connect the grounding conductor.
2. Install the top (gully top, tray channel, slot and box channel outlet unit). To make installation easier, use the enclosed ACO lubricant.



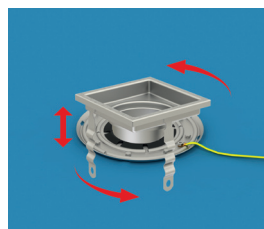
Phase 9

3. Adjust the gully top and channel to the required height and horizontal plane, according to the final level of the floor.
4. Rotate the gully top and channel to the required position and verify the correct location of the friction lock ring.

The protective elements, for example blister, protective tapes and spacers, must be left in their places for the entire period of the installation!

ATTENTION

The gully top may be only in slight contact with the supporting ring of the foul air trap. The supporting ring position must not change.



If the lower installation height of the gully top and channel is required, it is necessary to cut the outlet pipe of the gully top and channel.

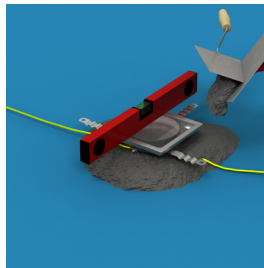
The upper edge of the gully top and channel may not in any case be higher than the height of the completed floor!

Installation into the ceiling slab with fit-in

Phase 10

1. If the grounding is necessary, connect the grounding conductor to the gully top.
2. Before concreting the floor, secure the gully top and channel against the movement by its partial concreting to the grounding bolt.
3. Before placing the concrete over the entire floor, it is necessary to keep the technological break to ensure the curing of the concrete.

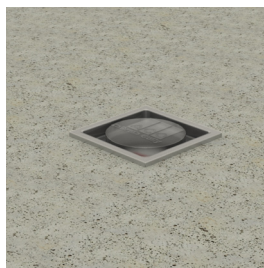
During the concreting, keep the blister on as the protective cover to prevent the dirt penetrating the gully top and channel.



Phase 11

1. Complete the concreting to the required height.

Consider the wear layer thickness of the completed floor.



≡ Telescopic solution

Installation into the ceiling slab with fit-in

Phase 12

1. Lay the final floor layer (resin floor, tiles).
2. If the final layer of the floor is to be tiles, fill the gap around the gully top and channel by flexible sealant.
3. Remove all protective elements.



Phase 13

1. Check the installation of the foul air trap. The foul air trap must be installed by pressing into the foul air trap support, uniformly all around the circumference.
2. Fill the foul air trap with water.
3. Install the grating.

